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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/956,953	09/21/2001	Yoshiharu Yabuki	0649-0803P-SP	2457
2292	7590	11/13/2003	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH			ALEXANDER, LYLE	
PO BOX 747			ART UNIT	
FALLS CHURCH, VA 22040-0747			PAPER NUMBER	

1743

DATE MAILED: 11/13/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

CLO 6

Office Action Summary

Application No.

09/956,953

Applicant(s)

YABUKI ET AL.

Examiner

Lyle A Alexander

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The preamble of the claim is directed to a method of detecting moisture. However, step (iii) does not appear to fulfill the preamble because it is not an action taken by the user performing the method but rather an inherent property of the composite. Clarification could be achieved by replacing lines 4-8 "whose wetness" with "wherein the dye and decoloring agent are initially spatially isolated from each other on the composite and upon exposure to moisture or wetness the dye and/or the decoloring agent migrate towards each other on the composite material to react and decolor the dye --. This language is just a suggestion and any other language with this same spirit would probably be acceptable as well.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 4 is rejected under 35 U.S.C. 102(b,a) as being clearly anticipated by Timmons et al or JP 2000105230 respectively.

Timmons et al. teach a moisture indicator where the color pattern disappears in the presence of moisture.

JP 2000105230 teaches a method and compound for the detection of moisture contact history by the decoloring of coloring agent. As the reference is best understood compound B discolors compound A. Exemplary of compound A is flourane.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-3, 5-6 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2000105230 in view of Ohtsu et al. or Chosa.

In light of the above 35 USC 112 issues, the claims are best understood as a colorimetric device changes color in the presence of moisture.

JP 2000105230 teaches a method and compound for the detection of moisture contact history by the decoloring of coloring agent. As the reference is best understood compound B discolors compound A. Exemplary of compound A is flourane.

JP 2000105230 is silent to the claimed methane dye.

Ohtsu et al.(see col. 6 lines 23-25) and Chosa (see col. 3 lines 49-54) teach flourane and methine dyes as equivalents.

The court decided In re Boesch (205 USPQ 215) that optimization of a result effective variable is ordinarily within the skill of the art. A result effective variable is one that has predictable, well known or equivalent functions. It is also desirable when manufacturing a device to select from equivalent components based upon availability and cost.

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It would have been within the skill of the art to modify JP 2000105230 in view of Ohtsu et al. or Chosa and use methine dye as an equivalent for flourane as optimization of a result effective variable and to use readily available and possibly lower cost equivalent components.

Claims 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2000105230 in view of Greyson et al.

See JP 2000105230 *supra*.

JP 2000105230 is silent to the use of gelatin as a binder and the claimed interlayer thickness of 0.1 to 100 microns.

Greyson et al. teach in column 3 lines 43+ binders are useful to adhere the dyes/reagents to the carrier matrix. It is advantageous to bind the dye/reagent to the matrix to prevent them from bleeding out when contacted with a fluid. Gelatin is taught as a suitable binder.

It would have been within the skill of the art to further modify JP 2000105230 in view of Greyson et al. and use a gelatin binder to gain the above advantages.

The court decided In re Antonie (195 USPQ 6) that a simple difference in size over the prior art would have been obvious. JP 2000105230 is silent to the interlayer thickness, but in view of Antonie above, the difference between the taught thickness and the claimed would have been obvious.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. JP 61123682A teaches a methine dye composition capable of determining

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moisture. This reference fails to disclose if the color of the methine disappears when the moisture is detected.

Response to Arguments

Applicant's arguments filed 9/8/03 have been fully considered but they are not persuasive.

Applicants state Timmons fails to teach the migration of a decoloring agent and/or a dye. These remarks are not commensurate in scope with the rejection of claim 4 that does not require the migration of a decoloring agent and/or a dye. Further, Timmons teaches in column 3 lines 60-63 the coloring agent is water dispersed. The Office has read the claimed "decoloring agent" on the water and the colorant on the taught coloring agent.

Applicants state JP'230 does not teach the claimed method because the color developing compound and the colorant are separated upon application of water. These remarks are not commensurate in scope with the rejection of claim 4 that does not require the migration of a decoloring agent and/or a dye.

Applicants state the secondary references of Chosa and Ohtsu fail to teach methine as a moisture indicating dye. The Office maintains these references teach the equivalence of the indicator taught by JP'230 and methine and have been properly applied here.

Applicants state Greyson et al. fails to teach the deficiencies of JP'230 with respect to claims 7-11. The Office maintains Greyson teaches compelling reasons to bind a dye to a test device and has been properly applied here.

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Allowable Subject Matter


Claim 15 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lyle A Alexander whose telephone number is 703-308-3893. The examiner can normally be reached on Monday, Wednesday and Friday.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.


Lyle A Alexander
Primary Examiner
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